



MADRAS CHRISTIAN COLLEGE, TAMBARAM, CHENNAI - 600059

MCC BOYD-TANDON SCHOOL OF BUSINESS

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## Post Graduate Certificate in Data Analytics for Business Applications



**Brochure 2020-21**



**MCC Boyd-Tandon School of Business**, a unit of the prestigious Madras Christian College with its nearly two centuries legacy of nation building, aims to prepare management professionals who will bring business, social and spiritual values through one of its programs namely 'Data Analytics for Business Applications' in order to fill the talent gap in this part of the country.

Relying on the recent experience of offering certificate and diploma programs in data analytics with expertise brought from the industry, MCC BTSB now offers to the corporate employees who crave to upskill themselves for the new challenges and to tap the opportunities that buzz all around to make their career a greater success in terms of meaningfulness and rewards, the following program for the academic year 2020-21.

### Post Graduate Certificate in Data analytics for Business Applications PGC DABA

#### Duration

9 months -150 Hours including Project work

#### Eligibility

Graduates / Engineering graduates with/without industry experience / Students currently studying PG courses of any specialization

#### Size

A lean Batch size for learning effectiveness: 30

#### Value

Classes will be handled by Guest Faculty members from industries in addition to the core faculty members of MCC BTSB. Practical sessions with Industry support & Numerous Live case studies and real time learning

#### Fees

₹ 49,000 payable in 2 equal installments

#### Time

Only on Saturdays - 9.30 a.m. to 12.30 p.m. & 1.30 p.m. to 4.30 p.m.

#### Mode of Teaching

Online classes only.



## Expected Outcomes

**# 1 Skill of Programming** You will get hands on experience to manage volume of data through various statistical programming tools like “R” and packages.

**# 2 Quantitative/ Statistical Skills** Learn basics and core concepts in statistics and equip yourself to apply these concepts to your business problems using programming tools and techniques.

**# 3 Multiple Tools & Technologies** You will get exposed to R programming, Tableau, Power BI, Analysis tool pack etc. to handle your business big data

**# 4 Understanding business problems and perspectives** Experts from business comes with lot more real time business problems, application-oriented case studies which is a key differentiating factor for the program.

**# 5 Interpret the outcome and its business impact** The Program objective is not to teach you the tools alone but how to understand the business problems, use of right techniques with the aid of right tool.

Interested students can download the application form and send the duly filled in form to the following mail id or WhatsApp number:

[dr.rajasingh@mcc.edu.in/9444268866](mailto:dr.rajasingh@mcc.edu.in/9444268866)

**Tentative Date of Commencement**

**03.10.2020, Saturday**



## Module 1: Introduction to Data Analytics & Business Management

Role of Big data in Business Decisions - Process Gaining value through Data Analytics - Methods and Applications of Statistics in Business Management - Phases of Analytics lifecycle and its alignment to project management - Big Data Analytics architecture & Current tools & technology landscape - Case Studies - Applications of Business Analytics in different domains

## Module 2: Analytics Techniques using Advanced Excel

Mastering pivot table, Advanced Sorting-filtering & Data Manipulation - Analysis using Advanced Excel - Statistical Tools in Microsoft Excel - Visualization techniques - Clean up and prepare data for analysis using Excel - Linking Tableau to a Dataset-Navigating Tableau - Measures and Dimensions - Power BI & industry Applications - Generate Basic Tableau Visualizations - Business intelligence services dashboards and performance scorecards -Demo / Practice on Executive dashboard

## Module 3: Fundamentals of Statistics & R Introduction

Descriptive Statistics (Measures of Central Tendency, Dispersion and Correlation) - Inferential Statistics (Probability and distributions) - Hypothesis Testing and Estimation-Goodness of Fit and Test of independence - Introduction to R & its importance in current industry applications - Data Types, Variables, Operators & Conditional statements Loops & Functions in R - Cleaning of Data using R - Graphics in R

## Module 4: Advanced Module on Statistics, R Programming & Data Mining

Linear Models & Logistics regression in R-Model, ANOVA-Factor Analysis and Principal Component Analysis - Unsupervised Learning: Clustering & Association rules - Predictive Modelling - Market Basket Analysis - Business forecasting using R (Time series & ARIMA) - Machine learning techniques - Model validation & Model Comparison and Further Improvement - End to end Management of a Big Data Analytics Project

## Module 5: Emerging Industry Solutions using Data Analytics

Unstructured data analysis introduction - Text mining - Web and Social Media analytics - Emerging Industry Solutions using data analytics - Sensor Analytics - Role of Big data analytics in Internet of Things ( IoT ) - Cloud fuelled Data Analytics Architecture & Opportunities - Convergence of Big Data, IoT and Cloud Computing - Industry Perspective Lectures

