



MADRAS CHRISTIAN COLLEGE, TAMBARAM, CHENNAI - 600059

MCC BOYD BUSINESS SCHOOL

13<sup>th</sup> Ranked College in India by NIRF 2019



## Post Graduate Certificate in Data Analytics for Business Applications

*Eminent Faculty  
Real Time Analytics  
Great Opportunity for the New Age Career  
Technical Support from IBM  
High End Value Delivered*

Brochure 2019-20



**MCC Boyd Business School**, 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 BBS 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 2019-20**.

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

The first step is to create and nurture the ability to access all the world of data in its multiple formats and correct the discrepancies and use the tools of data analytics for finding solutions to problems and taking the most appropriate and timely decisions to enhance value to the stakeholders. **IBM** has predicted that there is going to be a 29 percent increase in the demand for Data professionals in the next two years. This is in top of the nearly 2,50,000 unfilled posts of data professionals across a country like India only because the industry is unable to find people with the right talent set. It is an opportune moment for the already employed to be high powered on new forte- the world of analytics.

#### **Duration**

10 months -240 Hours including Projects / Internships

#### **Eligibility**

Graduates with industry experience / Engineering graduates with/without industry experience / Students currently studying PG - Preferably Statistics, Mathematics, Economics or Commerce.





**Size** A lean Batch size for learning effectiveness: 30

## Value

Practical sessions in computer laboratories with IBM support & Live case studies and real time learning

## Time

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

## Venue

MCC - A sprawling Green Campus with modern learning facilities

## Resources

Learn from Industry Experts in Business Analytics and Be mentored by them

## Fees

₹ 98,000 payable in 2 equal instalments (July and December 2019)

Scholarships up to 50 % are available for Meritorious Students pursuing PG Programs

## Award

The **PG Certificate in Data Analytics for Business Applications** will be awarded by MCC Boyd Business School on successful completion of the course.

## 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.

**Date of Commencement** 06.07.2019, Saturday



Classes will be handled by Guest Faculty members in addition to the core faculty members of MCC Boyd Business School. **Practical classes will be conducted with the technical support of IBM**

## Guest Faculty



**Dr. Rahul Marathe R, Associate Professor, Department of Management Studies, IIT Madras.**

Dr. Rahul holds PhD - Major: Industrial Engineering; Minor: Statistics, Iowa State University, Ames (2006), M.S.- Industrial Engineering, Iowa State University, Ames (2003) and B.E. - Production Engineering (VJTI) Mumbai University (1998). His teaching and research interests lie in Stochastic Modelling, Data Analysis, Game Theory and Operations Research. He is serving Indian Institute of Technology, Madras since 2013.



**Meenakshi Variankaval, Vice President, Matrimoni.Com Pvt Ltd  
MSc Applied Statistics and Informatics (IIT Mumbai)**

Ms. Meenakshi is seasoned analytics professional with over 20 years of experience in Sales, Marketing, HR, Supply Chain and Market Research functions across multiple industries (Life Science, Healthcare, Retail, Consumer Products, and Airlines). She has developed several data driven frameworks for business process optimization and decision support systems in the organizations she was associated with. She had led analytics service delivery teams across organizations like IBM, Cognizant Technologies and GE capital. At IBM and Cognizant Technologies, she was responsible for growth of analytics revenue and service delivery excellence for their pharmaceutical, retail and CPG clients.



**Dr. D. Nirmal Raj  
Senior Manager & HR Analyst in a leading IT company**

Dr. Nirmal Raj holds PGDBM from Loyola institute of Business Administration (LIBA) from Chennai and Masters in Physics from Loyola College, Chennai. He comes with more than 12 Years of experience in all facets of HR. His passion for teaching Analytics won him accolades in the academic arena. Expert in design, conceptualizing and implementing data analytics programs.





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

Role of Big data in Business Decisions - Process of 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 - Clean up and prepare data for analysis using Excel - Statistical Tools in Microsoft Excel - Visualization techniques using Advanced Excel-Generate Basic Tableau Visualizations - Linking Tableau to a Dataset-Navigating Tableau - Measures and Dimensions - Power BI & industry Applications -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 - Mini Project Work - Phase1

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

Linear Models & Logistics regression in R-Model Selection in R-Multiple Linear Regression, 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

## 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 - Role of Big data analytics in Internet of Things ( IoT ) Architecture & Opportunities - Cloud fueled Data Analytics & Convergence of Big Data, IoT and Cloud Computing - Industry Perspective Lectures- End to end management of a Big data Analytics Project - Project work - Phase 2



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