



# **ADD WINGS** TO YOUR AMBITIONS WITH A CAREER IN **DATA SCIENCE**

Job oriented Dygitech Courses  
with Maximum Industry Exposure



## WHAT DIFFERENTIATES DYGITECH?

Organizations today, are always on the lookout for young professionals who are proficient in emerging technologies and can thereby contribute to overall business from day one.

Team Dygitech is focused to deliver a platform/product that is much more than just an analytics course. The team is very dynamic and intends to achieve more than what others do in similar time frames. Apart from bringing the finest faculties from IITs, IIMs, ISIs and big corporate houses, Dygitech has robust link-ups with many large and medium scale organizations. This would act as an impetus for providing placements to its students.



## THE JADAVPUR UNIVERSITY PARTNERSHIP

The prestigious Jadavpur University has selected Dygitech to conduct its Post Graduate Diploma in Data Science course. This is no mean feat and goes on to speak volumes about the quality standards of the institute. In fact, Dygitech curates and conducts the Jadavpur University curriculum to create data scientists and business analysts of the future.





# THIS PROGRAM IS FOR YOU!

Graduates or experienced professionals from various quantitative backgrounds like Engineering, Commerce, Computer Science, Finance, Math, Business Management, et al., can join the course. They would be empowered with the ability of critical thinking and using modern day analytical tools.

## Some of the main reasons you want to pursue this program are:

- ◆ you would want to develop sound domain knowledge as an integral part of your skill set
- ◆ You want to acquire programming skills that will be a plus in your career ahead
- ◆ You want an in-depth understanding of data visualization skills
- ◆ You want to be a critical problem solver in today's business environment

## What kind of assistance will be available to participants to secure a position as a **BUSINESS ANALYST?**

### **Resume Preparation:**

Based on your current background and experience, we will help you build a focused resume.

### **Resume Critique:**

Resume review and critique helps you avoid pitfalls and build a strong CV.

### **Interview Preparation**

- ◆ Interview questions.
- ◆ One on one preparation and mock interviews.





## **COURSE OUTLINE - BEGINNER LEVEL**

### **01. Introduction to Business Process and Models**

You will learn about various sources of revenue and expenses of a business. In this session important sectors like Banking & Financial Service, Retail & FMCG, Healthcare & Pharma, Construction & Heavy Engineering will be covered along with live case studies and modern theories.

### **02. Introduction to Business Metrics**

You will learn the industry standard metrics that incorporates various industry and business functions. Case study driven approach will augment your exposure to the leading practices in the business.

### **03. Introduction to Data Analysis in Excel**

This course is designed to give you a working knowledge of MS- Excel with the aim of utilising it for more advance topics in Business Statistics.

### **04. Introduction to Applied Business Statistics**

This session begins with the notion of descriptive statistics. Different categories of descriptive measures are introduced. The notion of probability or uncertainty is introduced along with the concept of a sample and population data using relevant business examples. This is followed by hypothesis testing and applying the concept of inferential statistics to Business.

### **05. Regression and Classification for Business Applications**

As a beginner in the advanced analytics, you will learn the most widely used techniques and apply them in real life scenarios from industry. This chapter will include a significant section dedicated to practical lessons.

### **06. Tools and Techniques of Data Visualization and Communication**

Data Visualization characterizes the skill of communicating practical implications of quantitative analysis to any kind of audience. Here you will learn to "Ask the right Question" from inception.



## COURSE OUTLINE - INTERMEDIARY LEVEL

### 01. Introduction to Data Science

This course introduces main tools and ideas in the data scientist's toolbox. The course gives an overview of the data, questions, and tools that data analysts and data scientists work with. There are two components to this course. The first is a conceptual introduction to the ideas behind turning data into actionable knowledge.

### 02. Guide to R Programing

This session introduces R programing language; the numero-uno choice of Data Scientist. The session would impart all the necessary tricks required for managing and manipulating Data in R environment. The session also introduces the participants to IDE for R, i.e., RStudio.

### 03. Building Data Products using Shiny R

A data product is the output of a statistical analysis. Data products automate complex analysis tasks or use technology to expand the utility of a data informed model, algorithm or inference. This course covers the basics of creating data products using Shiny, R packages and interactive graphics.

### 04. Exploratory Data Analysis

This session covers the essential exploratory techniques for summarizing data. These techniques are typically applied before formal modelling commences and can help develop more complex statistical models.

### 05. Managing Data With MySQL - Building block of Business Intelligence

This course is an introduction on how to use relational databases in business analysis. We shall use SQL syntax to extract and manipulate data in the database. Analysts who understand how to access this data – (Analyst means you!) – will have a strong competitive advantage in this data-smitten business world.

### 06. Putting it together - Walk through an end-to-end Data Science Project

In this session we shall perform all the steps of Data Science which are required to solve the 'right' Business problem. It will start with 'Asking the right question' and then follow the steps to build and deploy a robust model for prediction. You shall be using Shiny R along with other necessary R tools. While data sets will be given in advance in a specified format, it is you who will turn them into actionable insights.

## COURSE OUTLINE - ADVANCED LEVEL

### Practical Machine Learning

This course will cover the basic components of building and applying prediction functions with an emphasis on practical applications using machine learning techniques. In this class you will get a broad introduction to machine learning, data mining, and statistical pattern recognition. Topics include:

(i) Supervised learning (parametric/non-parametric algorithms, support vector machines). (ii) Unsupervised learning (clustering, Apriori Algorithm, dimensionality reduction). (iii) Best practices in machine learning (bias/variance theory, innovation process in machine learning and AI).

### Introduction to Deep Learning Techniques

Deep learning (also known as deep structured learning, hierarchical learning or deep machine learning) is the study of artificial neural networks and related machine learning algorithms that contain more than one hidden layer. Deep learning is part of a broader family of machine learning methods based on learning representations of data. In this session, we shall introduce the neural net and how they can be used in detecting images.



# STAY ON COURSE WITH DYGITECH COURSES

## Personalized Learning

Get personalized attention from industry mentors.

## Hands-on Exposure

Practical sessions and experiential learning opportunities for an all-round experience.

## Distinguished Mentors

A panel of distinguished faculty drawn from the best in industry will provide practical knowledge and insights into real world problems.

## Research Lab

An unlimited access to a state-of-the-art research lab, coupled with live projects on the go makes courses at Dygitech sought after by the future data scientists and business analysts.

## Industry Exposure

Access to insights from industry and analytics experts and exposure to thought leaders' viewpoints. Our course is clubbed with a real time internship and projects.

## Career Support

- ◆ Career enhancement sessions with business experts
- ◆ 100% placement guarantee after course completion
- ◆ Personal laptop

# ADVANCED DIPLOMA IN BUSINESS ANALYTICS

## Introduction to the Program

Data driven decision making based on deep understanding of the business processes has always been the prime ask of the industry. While analytical reporting has helped the corporates with such decision making, recent emergence of business analytics and data science has unearthed innumerable possibilities for them to gain significant competitive advantage. Global studies by McKinsey confirmed that there will be a serious dearth of data scientists by 2018 across the world.

While analytics courses are aplenty, gaining enough industry exposure as part of the course helps the student become more employable. One more study stresses that academic courses need more involvement of the industry. Dygitech would be the right choice for young learners to gain deep insights into industry processes and applicability of analytical concepts in practical scenarios.



**Dygitech**  
Business Analytics Academy



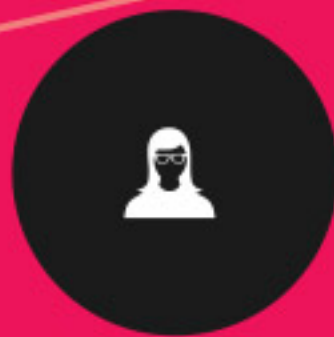
# SELECTION PROCESS NEEDED TO QUALIFY THE DYGITECH ENTRANCE EXAM



Maths / Stats /  
Economics



Aptitude Test



Personal Interview

# 100% job guarantee

on successful completion of  
the course



Personal laptop will be  
provided to all students  
during course

## HOW TO APPLY?

≡ Download form [Dygitech.com](https://dygitech.com)

**Dygitech**  
Business Analytics Academy







# Dygitech

Business Analytics Academy

from the house of

## Dygitech

Transforming Knowledge into Practice

“ Information is the oil of the 21st century, and analytics is the combustion engine. ”  
- Gartner

“ It is a capital mistake to theorize before one has data. ”  
- Sherlock Holmes

“ Data is the Next Intel Inside. ”  
- Tim O'Reilly

“ India will face a demand supply gap of 200,000 analytics professionals over the next three years ”  
- Team Lease

“ In North America alone, Companies will need around 1.5 million managers and analysts with the know-how to use the analysis of big data to make effective decisions by 2018 ”  
- Mckinsey



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