

National Institute of Construction Management and Research (NICMAR), established over three and-a-half decades ago by the Indian Construction Industry, is India's leader Post Graduate Institute in Construction Management, Real Estate Management, Infrastructure Management and Project Management (CRIP). With strong support from the industry, NICMAR is recognised as a prestigious Centre of Excellence in techno-management education in construction sector. Applications are invited for admissions to the following online programme commencing August, 2021.

**ADMISSIONS 2021**

## Online Post Graduate Programme in Construction Business Analytics (PGP CBA) Eleven month part time week-end programme

offered from NICMAR Pune Campus on Saturdays (09.00 a.m. to 05.30 p.m.)

### OBJECTIVES

The purpose of the programme is to inculcate in students the ability to use probabilistic models and optimization tools and how to leverage data to make optimal decisions and become experts in business analytics and become leaders in the areas of construction business management.

After pursuing the programme, the student will:

- Understand how to use predictive analytics tools to analyze real-life business problems.
- Acquire expertise to analyse practical problems using predictive analytics techniques to interpret model outputs
- Develop business analytics ideas, analyze data using business analytics software, and generate business insights
- Apply business analytics to improve business performance.

**PROGRAMME DURATION** : 11 months (44 weeks)

**TEACHING HOURS** : 303 (7 hours per week)

**TOTAL NUMBER OF TERMS**: Four

**TEACHING DAYS** : Saturdays, online

### WHAT YOU WILL LEARN

- Advanced applied statistical techniques & methods;
- Data collection and data visualizations;
- Descriptive statistics;
- Basic probability, statistical inference;
- Creating linear models;
- Predictive and prescriptive analytics;
- Construction & project management;
- Estimation, Tendering & Quantity Surveying;
- Essentials of accounts and financial management;
- Essentials of people management.

### Programming & Software Packages

- Hadoop
- SQL;
- Python;
- R;
- Data Mining;
- Candy (estimation software)
- Microsoft Project;
- Primavera;
- BIM;
- Predictive Modelling

### Eligibility

- Bachelor's degree in any discipline from a recognised institution / university.
- Bachelor's degree in engineering or technology / Econometrics / Statistics / Mathematics / Information Technology / Science from a recognised institution will be preferred.

### Courses

#### Term 1

Introduction to Statistics & Probability Distribution  
Introduction to Data Warehousing and Mining  
Essentials of Construction & Project Management  
Tendering and Bidding

#### Practice Workshop

Python for Data Analytics

#### Term 2

Contracts & Claims Management  
Accounts & Finance  
Estimation and Quantity Surveying with Candy  
Optimization Analytics

#### Practice Workshop

R for Data Analytics

#### Term 3

Data Curation & Big Data Analytics using Hadoop & SQL  
Essential Mathematics & Probability for Data Analytics  
Introduction to Machine Learning Algorithms  
People Management

#### Practice Workshop

Data Visualization using Python & R

#### Term 4

Contract Analytics  
Financial Analytics  
People Analytics

#### Practice Workshop

Computerized Project Management & Analytics (MSP & Primavera)  
Building Information Modelling

**Apply**

For details and Application Form visit [www.nicmar.ac.in](http://www.nicmar.ac.in) or write to The Dean, School of General Management, NATIONAL INSTITUTE OF CONSTRUCTION MANAGEMENT AND RESEARCH, 25/1, Balewadi, N.I.A. Post Office, Pune - 411045. Tel.: (020) 66859175 / 187 (9.00 a.m. to 1.00 p.m., Monday to Friday) / Mobile: + 91 94226 06490

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