PGP-DSBA
POST GRADUATE PROGRAM IN
DATA SCIENCE & BUSINESS ANALYTICS
FORMERLY PGP-BABI
HOTTEST JOB OF THE 21ST CENTURY

In 2020, global estimate calls for 2.7 million job postings for analytics & data science roles.

50% data scientists & business analysts have a Master's degree.

28.8% CAGR Indian analytics industry
Indian Analytics Industry is growing rapidly as compared to IT.

8.6% CAGR IT sector

By 2020, India will face a demand-supply gap of 2,00,000 data science professionals.

OUR CREDENTIALS

NUMBER 1
Data Science Program in India for 5 Years in a Row

15,000+
Students

90%+
Participants recommend the program to others

10 Million+
Hours of Learning Delivered

1100+
Industry Experts & 25+ India's Best Data Science Faculty

70+
Batches
India’s No.1 Data Science Program

Great Lakes is one of the premier business schools in the country and has been ranked within the top ten in the country by Outlook, Business Today and Business India. This program has been ranked No. 1 by Analytics India Magazine for the fifth time in a row, and No.2 by Analytics Vidhya.

Industry Relevant Curriculum

The curriculum combines academic elegance and business relevance to facilitate the participants learn basics of management, followed by analytical techniques and weaves them with applications for data-based decision making.

Corporate Partners

The program is designed, delivered and endorsed by leading analytical, technology and consulting organizations. Our corporate partners are involved in curriculum design, facilitating projects, industry lectures and also suggesting pedagogical improvements.

Hands on Exposure

An integral part of the learning experience is the use of Data Science and Analytics tools wherein the candidates get hands-on exposure to R, Tableau, SAS (online) and Python.

Flexible Learning

The PGP-DSBA program provides utmost learning flexibility. Learn while you earn with online sessions. We accommodate transfer cases and sabbaticals and provide the option to catch up even when you have missed classes.

International Collaboration

The program is internationally recognized and participants earn dual certificates from McCombs School of Business - the University of Texas at Austin and Great Lakes Institute of Management.
Program Delivery
The program is delivered in two formats. Professionals can choose the “classroom format” to attend 30 classrooms sessions in a span of 12 months or the “online format” with 30 mentorship sessions spanning over 11 months. Classes are conducted on weekends and public holidays, causing minimal disruption to work schedule.

Online-Learning Management System
All candidates have access to the online LMS that hosts content (classroom recordings, discussion forums, assignments, reading material) and live webinars to enable the candidates continue their learning during campus. The LMS provides an innovative learning environment that encourages collaborative approach between the candidates thus paving the way for maximizing learning effectiveness.

Capstone Project
All candidates would be pursuing an application oriented capstone project in the field of Business Analytics. The project shall be mentored and evaluated by faculty from Great Lakes or Industry. The project will be presented to the faculty board as part of the requirement for successful completion of the program.

Industry Perspective Lectures
This is an important component of the program that complements and substantiates the learning with an applied orientation. The participants get the opportunity to listen to eminent speakers from leading analytics companies and assimilate the best practices discussed by them in their lectures.

Experiential Learning
This program is designed to transform candidates to business-ready data science and analytics professionals through hands-on experiential learning on relevant tools. This is achieved through practice exercises, hackathons, quizzes and assignments on software packages such as R, Tableau, SAS (online) and Python.
PROGRAM CURRICULUM

FOUNDATIONS

**Introduction to Analytics**
- Python/R for Data Science
- Introduction to Python/R
- Dealing with Data using Python/R
- Visualization using Python / R
- Python-Markdown
- Missing Value Treatment
- Exploratory Data Analysis using Python/R

**Marketing & CRM**
- Core concepts of marketing
- Customer Life Time Value
- Marketing metrics for CRM

**Statistical Methods for Decision Making**
- Descriptive Statistics
- Introduction to Probability
- Probability Distributions
- Hypothesis testing and estimation
- Goodness of Fit

ANALYTICS TECHNIQUES

**Optimization Techniques**
- Linear programming
- Goal Programming
- Integer Programming
- Non-Linear Programming

**Predictive Modeling**
- Multiple Linear Regression(MLR) for Predictive Analytics
- Logistic Regression
- Linear Discriminant Analysis

**Business Finance**
- Fundamentals of Finance
- Working Capital Management
- Capital Budgeting
- Capital Structure

**SQL Programming**
- Introduction to DBMS
- ER diagram
- Schema design
- Key constraints & basics of normalization
- Joins
- Subqueries involving joins & aggregations
- Sorting
- Independent subqueries
- Correlated subqueries
- Analytic functions
- Set operations
- Grouping and filtering

**Advanced Statistics**
- Analysis of Variance
- Regression Analysis
- Dimension Reduction Techniques

**Data Mining**
- Introduction to Supervised and Unsupervised learning
- Clustering
- Random Forest
- Decision Trees
- Neural Networks
ANALYTICS TECHNIQUES

Time Series Forecasting
- Introduction to Time Series
- Correlation
- Forecasting
- Autoregressive Moving Average (ARMA) models
- Autoregressive Integrated Moving Average (ARIMA) models
- Case Studies

Machine Learning
- Handling Unstructured data
- Machine learning Algorithms
- Bias Variance trade-off
- Handling unbalanced data
- Boosting
- Model Validation

DOMAIN EXPOSURE

Marketing & Retail Analytics
- Marketing and Retail Terminologies: Review
- Customer Analytics
- KNIME
- Retail Dashboards
- Customer Churn
- Association Rules Mining

Web & Social Media Analytics
- Web Analytics: Understanding the metrics
- Basic & Advanced Web Metrics
- Google Analytics: Demo & Hands on
- Campaign Analytics
- Text Mining

Finance & Risk Analytics
- Why Credit Risk-Using a market case study
- Comparison of Credit Risk Models
- Overview of Probability of Default (PD) Modeling
- PD Models, types of models, steps to make a good model
- Market Risk
- Value at Risk- using stock case study
- Fraud Detection

Supply Chain & Logistics Analytics
- Introduction to Supply Chain
- Dealing with Demand Uncertainty
- Inventory Control & Management
- Inventory classification Methods (EOQ)
- Inventory Modeling (Reorder Point, Safety Stock)
- Advanced Forecasting Methods
- Procurement Analytics
Data Visualization using Tableau

- Introduction to Data Visualization
- Introduction to Tableau
- Basic charts and dashboard
- Descriptive Statistics, Dimensions and Measures
- Visual analytics: Storytelling through data

- Dashboard design & principles
- Advanced design components/principles: Enhancing the power of dashboards
- Special chart types
- Case Study: Hands on using Tableau
- Integrate Tableau with Google Sheets
CAPSTONE PROJECTS

**Retail**
Actionable insights for improving sales of a consumer durables retailer using POS data analytics

**Techniques used:** Market Basket Analysis, RFM (Recency-Frequency-Monetary) Analysis, Time Series Forecasting

**Web & Social Media**
Tapping social media exchanges on Twitter- A case study of the 2015 Chennai floods

**Techniques used:** Topic Modeling using 9 Latent Dirichlet Allocation, K-Means & Hierarchical Clustering

**Supply Chain**
Developing a demand forecasting model for optimizing supply chain

**Techniques used:** Text Mining, Kmeans Clustering, Regression Trees, XGBoost, Neural Network

**Retail**
Market basket analysis for consumer durables

**Techniques used:** Market Basket Analysis, Brand Loyalty Analysis

**E-commerce**
Customer engagement and brand perception of Indian ecommerce-A social media approach

**Techniques used:** Text Mining, Kmeans Clustering, Regression Trees, XGBoost, Neural Network

**Banking**
Developing best prediction model of credit default for a retail bank

**Techniques used:** Linear Discriminant Analysis, Logistic Regression, Neural Network, Boosting, Random Forest, CART

**Healthcare**
Prediction of user’s mood using smartphone data

**Techniques used:** Logistic Regression, Random Tree, ADA Boost, Random Forest, KSVM

**Insurance**
Personal insurance digital assistant

**Techniques used:** NLP (Natural Language Processing), Vector Space Model, Latent Semantic Analysis

**Entrepreneurship /Start Ups**
Start-up insights through data analysis

**Techniques used:** Univariate and Bivariate Analysis, Multinomial Logistic Regression, Random Forest

**Finance & Accounts**
Vendor invoicing grief project

**Techniques used:** Conditional Inference Tree, Logistic Regression, CART and Random Forest
FACULTY

Dr. Bappaditya Mukhopadhyay
Co-Director, Gurgaon, Professor - Analytics & Statistics, Great Lakes Ph.D (Indian Statistical Institute)

Dr. Kumar Muthuraman
University Distinguished Teaching Professor - McCombs School of Business, University of Texas at Austin Director, Center for Research and Analytics, H. Timothy (Tim) Harkins Centennial Professor, University Ph.D. - Stanford University

Dr. S Bhardwaj
Professor Ph.d (University of Maryland)

Dr. Ahindra Chakrabarti
Professor - Finance, Great Lakes, Ph.D (University of Burdwan)

Dr. Umashankar Venkatesh
Professor - Marketing, Great Lakes, Ph.D (Vikram University), MBA (Banaras Hindu University)

Prof. Snehamoy Mukherjee
Adjunct Faculty, Great Lakes MSc - Mathematics and Scientific Computing (IIT, Kanpur)

Prof. Vivek Anand
Adjunct Faculty, Data Visualization, Great Lakes MBA (Monash University Melbourne Vic.)

Dr. Narayana Darapaneni
Professor, Great Lakes Institute of Management PhD (Pierre & Marie Curie University, Paris)

Prof. Madhukar
Chief Data Scientist, WNS Global

Prof. Gurumoorthy P
Faculty, Data Science And Machine Learning

Dr. Subhajyoti Ray
Dean, XIMB

Dr. P. K. Viswanathan
Co-Director, Chennai, Professor - Analytics & Operations, Great Lakes Ph.D (Madras University), MBA (FMS Delhi)

Dr. Srabashi Basu
Professor - Analytics & Quantitative Methods, Great Lakes Ph.D (Penn State University, USA), MSc Statistics (University of Calcutta)

Dr. Sridhar Telidevara
Associate Professor - Statistics & Business Analytics, Great Lakes, Ph.D (State University, New York), MA (State University, New York)

Dr. Mudit Kulshreshtha
Professor - Analytics, Great Lakes, Ph.D (IGIDR, Advanced Research Institute of Reserve Bank of India)

Prof. Rajesh Jakhotia
Adjunct Faculty, Great Lakes, SMP (IIM, Calcutta)

Prof. Abhinanda Sarkar

Dr. Rohit Kapoor
Associate Professor, IIM Indore

Prof. Tushar Jarohar
Adjunct Faculty, Business Analytics

Prof. Krishna Mohan
Sr. Manager - Technology, Thomson Reuters

Dr. Narain Gupta
Assistant Professor, MDI

Prof. Raghavshyam Ramamurthy
Adjunct Faculty, Data Visualization

Prof. Vinit Thakur
Data Science Consultant & Trainer
The Structure of the PGP-DSBA program is very interesting, in which learning happens both inside and outside the classroom.

Mr. Lakshmi Narayan
Vice Chairman, Cognizant Technology Solution

Mr. Abhinav Kumar
AVP, Decision Analytics

Mr. Sanjoy Roy Choudhury
Vice President

Mr. Muthu Ramanujam
Head, Retail Bank Finance Analytics

Mr. Titir Pal
Director, Research & Analytics

Mr. Sundar Varadarajan
Senior Vice President & Practice Head, BI & Analytics

Dr. Satish Raghavendran
Vice President

Mr. Manu Chandra
Co-Founder & Director

Mr. Rajarajan TR
Principal Data Scientist

Mr. Suresh Krishnaswamy
Director, Analytics

Mr. Manish Gupta
Senior Applied Scientist

Mr. Eron Kar
Director & Head, Analytics Coe

Mr. Anshuman Gupta, PhD
Director, Data Science

Mr. V Shekhar Avasthy
Chief Data Scientist & Principal Consultant

Dr. Vinay M R
Practice Lead Data Scientist
The PGP-DSBA class comes from leading organizations. Some of their current employers include:

- Capgemini
- Honeywell
- Accenture
- IBM
- Google
- Amazon
- Adobe
- Yatra
- Jio
- EY
- Infosys
- Barclays
- Deloitte
- Microsoft
- Cognizant
- Samsung
- Yamaha
STUDENTS’ SPEAK

“Capstone project during the program was a great learning experience and helped me immensely during my statistical modeling projects.”

Vishranth
Senior Business Analyst

“I finally chose GL, being a blend of industry expertise and highly experienced teaching faculty. It’s a reputed brand in the management space with a focus on practical and tie-ups with many analytical firms. I did a compact yet quite powerful one-year course in Data Science and Analytics. Of course, placement assistance during and after course completion helped many candidates.”

Vilas Wakale
Independent Consultant

“The choice of Great Learning program over several others was a simple decision as this program allowed a blend of practical industry exposure and real life capstone project interspersed with domain knowledge through eminent faculty members and industry guests alike. Moreover, assignment-led assessment approach and a very robust LMS provided was thoroughly a rewarding experience.”

Amit Madan
Country Manager

“PGP-DSBA is a very targeted and focused course for professionals wanting to break-through in the analytics domain. The course is well structured with respect to content and is backed by great faculty and thus providing a solid platform to foray into the analytics domain.”

Karan Seghal
Associate Vice President

“It’s not really about learning the tools and techniques rather it has more to do with critical thinking and how you come up with a solution. I learned it well with Great Lakes PG Program - DSBA.”

Parul Oberoi
Engagement Manager

“I wanted a real physical classroom experience where I could interact with the faculty and my peers. With Great Lakes PGP-DSBA, I could leverage the benefits of classroom learning while continuing with my job.”

Vaibhav Kukreja
Associate Consultant
We conduct regular career fairs in various cities to connect our students to industry opportunities. Our recent GL Excelerate saw 12 hiring partners like Accenture, HSBC, Ust-Global, Rakuten, Myntra, DXC Technologies, Tredence, Brillio, TheMathCompany, AB InBev etc. conduct over 300 interviews for positions such as Business Analyst, Data Analyst, Data Scientist etc.

Get access to career mentoring depending upon your experience in the industry with a personal career coach. The coaches are either from the data science industry or have transitioned into data science and analytics roles so the candidates benefit from their guidance on how to build a career into analytics in a specific industry.

An e-portfolio is a snapshot of all the projects done and skills acquired during the program that is shareable across social media channels. We also help you build your resume to highlight your data science skill-set along with your previous professional experience.

The program provides candidates access to the Great Learning Job Board. 200+ organizations approach us with 30-40 job opportunities monthly which are shared through the job board with our candidates. Our candidates get an average salary hike of 48% on a successful transition.
ADMISSION DETAILS

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<th>Features</th>
<th>PGP-DSBA (Classroom)</th>
<th>PGP-DSBA (Online)</th>
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| Eligibility       | • Bachelor’s Degree in any discipline with a minimum of 50% aggregate marks in graduation or equivalent  
                    • For applicants with exceptional qualification and/or industry experience, a relaxation in the minimum eligibility criteria may be considered  
                    • Minimum of two years full time post qualification work experience |                                                                                  |
| Format            | Weekend classroom                                                                    | Online                                                                           |
| Program fees      | 3,95,000 + GST                                                                        | 2,25,000 + GST                                                                   |
| Fees inclusions   | Learning material, tuition fee and LMS access                                         |                                                                                  |

LOCATION

GURGAON
BENGALURU
CHENNAI

SELECTION PROCESS

1. The faculty panel will review all the applications and shortlist candidates based on their profiles.

2. The shortlisted candidates will then be going through a telephonic interview round which will then be reviewed.

3. The admissions will be conducted on a rolling basis and the admission process shall be closed once the requisite number of candidates have taken admission into the program.
Great Learning’s mission is to make professionals proficient and future-ready. Its programs always focus on the next frontier of growth in industry and currently straddle across Analytics, Data Science, Big Data, Machine Learning, Artificial Intelligence, Deep Learning, Cloud Computing and more. Great Learning uses technology, high-quality content, and industry collaboration to deliver an immersive learning experience that helps candidates learn, apply, and demonstrate their competencies. All programs are offered in collaboration with leading global universities and are taken by thousands of professionals every year to secure and grow their careers.

Great Lakes is India’s leading business school with campuses in Chennai and Gurgaon. Led by exceptional faculty and steered by an outstanding advisory council, Great Lakes is ranked amongst India’s top 10 business schools and is ranked as the best in the country when it comes to learning data science and analytics. Learning Data Science from Great Lakes ensures you get the industry credibility and acceptance as you look to build your career.

The University of Texas at Austin’s McCombs School of Business is ranked Second for its Master of Science in Business Analytics (MSBA) degree in 2018. McCombs is a premier business school at a worldclass public research university. It cultivates principled leaders and develop ideas through high-quality instruction, experiential learning, and the pursuit of relevant, groundbreaking research, shaping those who will shape tomorrow and solve the most challenging problems.