Advanced Data Analytics Program

In Collaboration with

**E&ICT Academy
IIT Guwahati**

Industry Partners

IBM   Microsoft

**175% Average
Salary Hike**

**Hybrid Model
for Project Sessions**

**450+ Hiring
Partners**
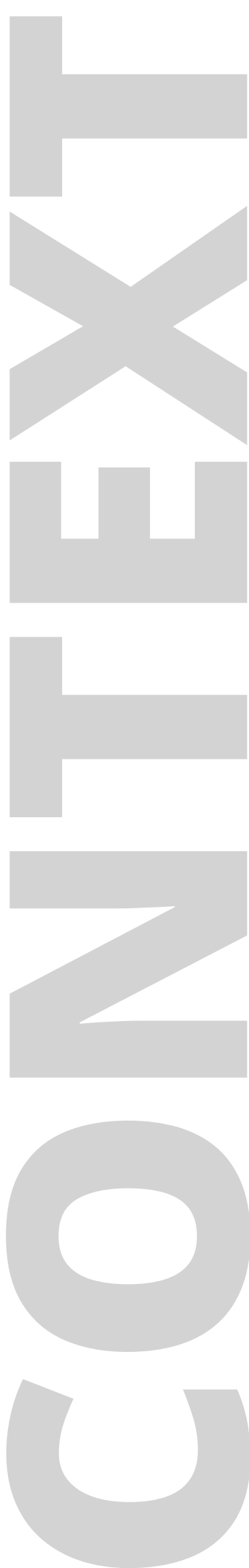
CONTEXT

Message from CEO, Learnbay

As Learnbay's CEO, I'm excited to welcome you to an amazing journey in learning. Here at Learnbay, we're all about helping you grow in Data Science and more. We think learning can open up endless chances for everyone.

We're not just about the usual school stuff; we're here to support your career in every way possible. What makes Learnbay special is how much we care about your success. I'm inviting you to start a great learning journey with us. Come be a part of Learnbay and see how dedication and passion can really change your path to being the best.

Message from Principal Investigator E&ICT Academy IIT Guwahati (Dr. Gaurav Trivedi)

As the principal investigator at E&ICT Academy IIT Guwahati, I'm happy to support and work with Learnbay on their Data Science and AI course.
We at E&ICT Academy IIT Guwahati, aim to lead the way in learning and research in Data Science and Artificial Intelligence.

I wish you all good luck with your studies at
Learnbay and am excited to see how you all do and grow in the interesting areas of Data Science and Artificial Intelligence

About **Learnbay**

2cr
Worth scholarships awarded

600+
Professionals secured jobs after a career break

35k+
Trusted learners

Learnbay is an online learning platform designed to empower working professionals by offering specialized courses tailored to various industries. At its core, Learnbay focuses on bridging the gap between academic knowledge and real-world applications, particularly in the fast-evolving fields of technology and data science. What sets Learnbay apart are its USPs - the Domain Specialization Courses and the Project Innovation Lab. These features are specifically designed to cater to the needs of different sectors, ensuring that learners not only gain theoretical knowledge but also hands-on experience with real-world projects. We also provide 360° career support for all our learners.

4.79/5   4.66/5   4.8/5   Great Place To Work Certified

Thousands of student reviews on Switchup, Course Report, Google and more

The E&ICT Academy at IIT Guwahati is a joint initiative supported by the Indian Government's Ministry of Electronics & Information Technology. Its goal is to prepare the upcoming tech experts, improve job chances, and grow skills in electronics and IT fields.

The Academy provides online courses like Data Science, AI & ML, Big Data, Cloud Computing, Web Development, VLSI Design, and Management. Over 2500 students and professionals have benefited from their training. They offer a top Advanced Certification in Full Stack Data Science & AI in collaboration with IIT Guwahati, which includes special guest lectures and a chance to experience IIT Guwahati's campus for two days.

Exclusive Features with E&ICT Academy IIT Guwahati
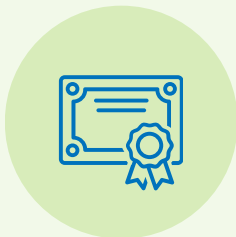
Advanced Certification of Full Stack Data Science & AI, jointly offered by E&ICT Academy, IIT Guwahati

Guest Lectures from top faculties of IIT Guwahati

Optional 2-day campus immersion at IIT Guwahati

About the **Program**

Learnbay's Executive Program in Data Analytics is crafted to set you on a path of success in the fast-evolving Data Science and AI industry. This program offers a deep dive into Data Analytics, equipping you with the skills needed to excel in this dynamic field.

Duration :

The total duration of this program is **6 months**

Eligibility

- Open to all: Whether you're a student, recent grad, or working professional
- Perfect for eager learners who don't quit easily
- Don't worry if you've never coded before – no experience needed

Who is this **Program for?**

- People wanting to start a career in Data Analytics
- People aiming to improve their skills with a top-level IIT certificate

Alumni Spotlight

Shravanthi A
Data Scientist

Learnbay has helped me a lot to learn data science applications in the e-commerce industry. The live class concept was really helpful in receiving proper DS training. Thanks to all my mentors and the placement team.

| Mechanical Domain | ➡ | Data Scientist @ | Ford | 📈 **230%** Salary Hike |

Preksha Mishra
Lead Data Scientist

The course structure is excellent with emphasis on concept building and tools & software at the same time. The support team is excellent and supportive and quite agile to respond to doubts.
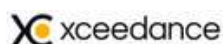
| Telecom Domain | ➡ | Data Scientist @ | HCL | 📈 **140%** Salary Hike |

Karan Chawala

xceedance
⬇
EXL
Data Scientist

Jaya Sinha

ADITYA BIRLA GROUP
⬇
Infosys
Senior Analyst

Shubham Dev

publicis sapient
⬇
brillio
Lead Data Analyst

Alumni Spotlight

Mohd. Israr
Data Scientist

Thanks to the Learnbay data science course & excellent guidance, I was able to ace the TCS interview and secure a job with a 210% pay raise. The real-world time projects helped me develop my concepts as a data scientist.

Mechanical Domain	➡	Data Scientist @	tcs	📈 **210%** Salary Hike

Saurabh Kumar
Data Scientist

When I joined Learnbay I did not have any knowledge apart from the very basics. I gradually build my concept via various trainers and get trained in data science with strong knowledge/concepts.

Mathematics Professor	➡	Data Scientist @	Teleperformance	📈 **135%** Salary Hike

Aravind

TheMathCompany
⬇
CATERPILLAR®
Senior Data Scientist

Ritesh Kumar

unacademy
⬇
Capgemini
Data Scientist

Ramki

cognizant
⬇
ANB SYSTEMS
energizing solutions
Data Analyst

Learnbay's ProjectLab

Choose Learnbay for your career journey because we're more than just a training provider. Our Project Innovation Lab lets you apply your skills in real-world scenarios. Get dual certifications for a competitive edge. Specialize in your desired domain. Discover how Learnbay can boost your career growth. Don't settle for less – choose Learnbay, your path to success!

1 Project Innovation Lab

Replicate a real-world industry environment for hands-on project experience.

2 Dedicated Placement Cell

Experience 100% placement assistance with guaranteed interview calls from leading MNCs and startups globally.

3 Degree & Certification

Gain top-notch skills for a successful career through our degree and certification program.

Learnbay's Project Innovation Lab replicates industry like environment for real time projects. With our **ProjectLab,** you gain real proof of hands-on experience by having your project certified by the industry.

In our ProjectLab, you work like a data scientist with dedicated project mentors from industry and get certified on capstone project.

450+
Hiring Partners

📍 **PUNE**

35k
Trusted Learners

1-1 Doubt Session

📍 **HYDERABAD**

Capstone Project Certificate from IBM

📍 **DELHI**

📍 **BENGALURU**

Project Innovation Labs across India

Get 1 Year of Job and Placement support

Unleash your career potential with 1 year of unlimited job access, interview support, and profile review.

3 Mock Interviews with Industry Experts

Master the art of data science & AI and stay ahead of the curve with mockups and industry insights.

Resume Building Session

Craft a powerful resume showcasing your expertise in software development to stand out from the competition.

Get Multiple Interview Calls

Receive 8-10 interview calls from a diverse pool of interested employers/recruiters.

3
Certificates

E&ICT Certificate

Add On-

IBM Course Certificate

Microsoft Course Certificate

Program Fee & Financing

Scholarship

Scholarships are awarded based on profile review. Eligible candidates can avail upto 25% scholarship on desired courses. Click the button below to apply.

Click below

Check Scholarship Eligibility

Financing as low as

Rs. 9,178/month

No Cost EMI

Razorpay

LIQUILOANS

Propelld

ShopSe

Program Fee

Rs. 1, 40,000/- +18% GST

Others Vs Learnbay

Benefits	Learnbay	Others
Guaranteed Interview Calls	✅	⬜
Industry Capstone Project Certificate from IBM	✅	⬜
Domain Specialized Programs for Professionals	✅	⬜
100% Live Interactive Sessions with Industry Experts	✅	⬜
On-Demand Video Call with Industry Experts	✅	⬜
Personalised Resume Review Session	✅	⬜

Learning Path

L1 — Cohort Orientation + Special Programming Classes

L2 — Python Programming (Basic + Advance)

Python, Anaconda, Github, Pandas

L3 — Statistics and Machine Learning

Matplotlib, Scikit-Learn, Seaborn

L4 — Data Analytics Tools

SQL, MongoDB, Tableau, PowerBI, Big Data & Spark Analytics, Time Series

L5 — Essentials

Excel

L6 — AI Generative Tools and Future Trends

ChatGPT, Midjourney, DALL·E

Meet Our Expert Instructor

Meet **Abhishek Gupta**, our principal trainer with over **8 years of experience!** Not only has he excelled in top tech firms, but he has also dedicated the last 5+ years to teaching. Abhishek Gupta will guide you through the complexities of Data Science, ensuring you're fully prepared for tackling the industry's challenges with ease.

Program Syllabus

## Preparatory Classes (Programming + Maths)

Cohort Orientation

- A brief introduction to tools related to data
- Learn about particular Real-time Projects and Capstone Projects
- Data and its impact on career opportunities
- Utilizing data to enhance industrial operations and management
  .

Programming Fundamentals

- Introduction to Anaconda & Jupyter notebook
- Flavors of python Introduction to Git, GitHub
- Python Fundamentals.

Tools covered | python | ANACONDA. | jupyter | GitHub
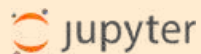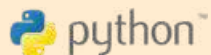
Fundamentals of Statistics

- Mean, Median, Mode .
- Standard Deviation, Average. Probability, permutations, and combinations
- Introduction to Linear Algebra.

Note:

This session is specially designed for non- programmers to understand basics of computer programming and math.

Those who wish to brush up their programming skills can also attend this session.

Download Detailed Curriculum ⬇

Program **Syllabus**

Python Programming   40 Hours

Basic Python

- Programming Basics & Environment Setup
- Strings, Decisions & Loop Control
- Python Data Types
- Functions And Modules
- File I/O An d Exceptional Handling and Regular Expression

Class Hands-on:
6 programs/coding exercises on string, loop, and conditions

8+ Programs to be covered in the class of functions, Lambda, Modules, Generators, and Packages

10+ Programs to be covered in class from File IO, Reg-ex, and exception handling

Tools covered | NumPy   pandas   matplotlib   seaborn
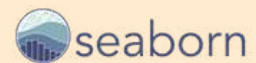
Advance Python

- Data Analysis Using Numpy
- Data Analysis Using Pandas
- Data Visualization using Matplotlib
- Data Visualization using Seaborn

Includes coding challenges & assessment

3 Case Study on Numpy, Pandas, Matplotlib
1 Case Study on Pandas And Seaborn

Real time project will be covered after Python completion with 2 hours of assessment (coding and objective questions)

Download Detailed Curriculum ⬇

Program Syllabus

Statistics & Basic Machine Learning

Statistics

- Fundamentals of Math and Probability
- All about Population & Sample
- Discrete Probability Distributions - Binomial, Poisson etc
- Introduction to Statistics, Statistical Thinking
- Descriptive Statistics
- Inferential Statistics
- Hypothesis Testing
- Linear Algebra
- Data Processing & Exploratory Data Analysis
- EDA, Statistics Assignments: Total 4 Practice Sets and Assignments from Statistics.

Machine Learning

- Introduction to Machine Learning
- Regression and Classification Models
- Linear Regression Model
- Data Preprocessing
- Encoding the Data
- Logistic Regression Model
- Evaluation Metrics for Classification model
- K Nearest Neighbours Model
- Decision Tree Model
- Random Forest Model
- Hyperparameter Tuning
- Naive Baye's Model,Case Study on Kart Model Business & Random Forest.

Download Detailed Curriculum ⬇

Program **Syllabus**

Data Analytics Tools

SQL

- SQL and RDBMS
- NoSQL, HBase & MongoDB
- JSON Data & CRUD
- Programming with SQL

Assignments
- Working with multiple tables
- Practice Joins, Grouping and Subqueries
- Using GROUP BY and HAVING Clauses
- Practice Aggregation Queries

MongoDB

- MongoDB Ecosystem
- MongoDB Structures
- MongoDB Shell vs MongoDB Server
- Data Formats in MongoDB
- Working with MongoDB Compass
- Working with Numeric Data
- Working on Scheme Designing

Assignment
Obtain the data in the format you want by formulating queries that are both effective and high-performing.

Projects are the culmination of your learning journey, where you will tackle real data-related problems.

Tableau

- Dashboard and Stories
- Visual Analytics
- Custom Geocoding
- Polygon Maps
- WMS and Background Image

Assignments
- Connecting data source and data cleansing
- Working with various charts
- Deployment of Predictive model in visualization

Program **Syllabus**

Data Analytics Tools

PowerBI

- Overview of the Workflow in Power BI Desktop
- Introducing the Different Views of the Data Mode
- Working with Time Series
- Scatterplots and BI Reports
- Connecting Dataset with Power BI

Assignments
- Create Bar Charts
- Create Pie Charts
- Create Treemaps
- Create Donut Charts
- Create Waterfall Diagrams
- Creating Table Calculations for Gender

Big Data & Spark Analytics

- Introduction To Hadoop & Big Data
- What is Spark
- Getting to know PySpark Hands-on: Map reduces Use Case: Youtube Data Analysis & Spark RDD Programming.

Time Series

- Introduction to Time Series Forecasting
- Introduction to ARIMA Models, Case Study on Time series classification of smartphone data to predict user behavior, Performing Time Series Analysis on Stock Prices & Time series forecasting of sales data

Download Detailed Curriculum

Program **Syllabus**

Excel

- Getting started with Excel
- Using Excel Toolbars: Hiding, Displaying, and Moving
- Toolbars Switching Between Sheets in a Workbook
- Entering Date Values and using AutoComplete
- Inserting and Deleting Cells, Rows, and Columns
- Working with the Forms Menu
- Creating & Working with Charts
- Changing a Chart Type and Working with Pie Charts
- Data Analysis & Pivot Tables

Download Detailed Curriculum ⬇

Program **Syllabus**

AI Generative Tools and Future Trends

Emerging Trends in AI and Generative Modeling

- Exploring other AI generative tools beyond ChatGPT and DALL·E
- Overview of Midjourney
- Discussion on future trends and advancements in AI generative tools
- Open-ended project and/or presentation on a selected topic, incorporating learned concepts

Natural Language Processing and ChatGPT

- Introduction to natural language processing techniques
- Understanding ChatGPT and its architecture
  Hands-on exercises using ChatGPT for text generation
- Fine-tuning ChatGPT for specific applications

DALL·E: Image Generation with AI

- Exploring image generation using DALL·E
- Hands-on exercises for creating unique images with DALL·E
- Ethical considerations and limitations of AI-generated images

Graph Neural Networks (GNN) for Data Analysis

- Overview of Graph Neural Networks (GNN) and their applications
- Hands-on exercises using GNN for tasks such as node classification and link prediction
- Case studies on real-world applications of GNN in data science

Program **Syllabus**

Python Bootcamp for AI

- Python Essentials: Syntax, Data Types, and Variables
- Flow Control: Conditionals and Loops

Build Your Interview Assistant

- Project Overview: Interview Automation Bot
- Components & Architecture
- Natural Language Models (LLMs): Introduction and Uses

Large Language Models (LLM)

- Historical Overview of NLP: From Rule-Based Systems to Machine Learning.
- Evolution of Neural Network Architectures in NLP.

Visual AI for eCommerce

- Introduction: Digital Transformation for Offline Businesses
- Multimodal Models: DALL-E and Beyond
- Style & Photography Principles for Visual AI

Intelligent News Aggregator

- Project Outline: Personalized News Recommendation
- GPT-3 & Copilot for Code Automation

Program Syllabus

Customer Support Bot - HelpMate Pro

- Project Introduction and Components Embeddings vs Fine-Tuning
- When and How Semantic Search in Customer Service

Knowledge Discovery Bot

- Project Overview and Architecture
- LangChain Tools and Concepts

Azure OpenAI Integration

- OpenAI on Azure: Services and Scalability
- Revisiting HelpMate Pro: Scaling Strategy

The Future & Ethics of Generative AI

- Responsible AI: Bias and Fairness
- Future Trends: Multimodal Models and RLHF Closing Remarks
- Assessment: MCQ

Capstone Project (3 Weeks)

- Building an Integrated Prompt Engineering Solution
- Project Submission and Peer Review

Real-time Projects

J.P.Morgan

Learn and develop classification techniques for the digital transformation of banking

JPMorgan offers tax-friendly insurance choices. You can help them forecast insurance premiums. Targeted marketing using your Random Forest Algorithm skills can help obtain better premium values.

python | pandas | scikit learn

NETFLIX

Building a content recommendation model on the basis of regional viewer categorization

Netflix is a global entertainment video streaming site. They offer content in various regional languages. Build a local recommendation engine for Netflix customers residing in south Bangalore on their weekend and weekday activities, utilizing NLP.

NumPy | SQL | Jupyter

OLA

Reduction of waiting time via a highly precise forecasting model

Make a demand forecasting model based on specific time period rider demands. Such a model will help both riders and cab drivers to ensure the least possible waiting time. You can include measures like latitude and longitude identification.

python | TensorFlow | Spark

saudi aramco

Understanding in-depth about logging while drilling (LWD) technique

Saudi Aramco company is working on the development of high-efficiency drilling models. Use the bright sides of big data analytics to identify the most cost- effective and highly productive drilling sites.

hadoop | matplotlib | aws

Real-time Projects

Career progression planning of employees with workforce defections and efficiency

19 hours

IBM intends to boost its HR department by identifying employees' masked inconsistency. They need models to identify the graphical variations in their 14000+ employees' performances. Help them build models with your regressions and other ML abilities.

python, pandas, scikit learn

Descriptive study of trends and irregularities with prediction analysis for conversion

21 hours

Swiggy seeks a broad marketing campaign. But they need automated keyword generation tools & proper message preparation and delivery of the same to the right audience at the right time. Help them with text analytics and NLP-based keyword research.

TensorFlow, SQL, Jupyter

Forecasting future sales with trends and price maximization

17 hours

BMW customers can sell old vehicles, but rivals provide superior resale prices. BMW's data science-powered software will deliver the greatest market value for used vehicles based on Km travelled, daily price changes, production dates, etc. Such tasks build analytical abilities.

Keras, GitHub, scikit learn

Understanding covid-19 cases and fatality rate by time series forecasting

13 hours

Samsung will launch a new healthcare app soon. The key goal of this app is an accurate human activity tracking and providing relevant health-related recommendations. Continuous analysis with of a massive amount of mobile data is required for such an app.

python, matplotlib, Azure

Contact Us

Click here to whatsapp

or call us at
+91 77956 87988

www.learnbay.co