

CURRICULUM - ASSOCIATE DATA ANALYTICS

EduBridge is a skill development and vocational training organization started by a group of IIM alumni and professors in October 2009, with Registered Office in Kolkata and Head Office in Mumbai. It has been setup with the vision of fulfilling the skill gap that exists currently between semi-urban/economically backward youth and the skill requirements of the high-performing companies/government organizations.

EduBridge is proud to be partner of National Skill Development Corporation (NSDC), a Govt. of India organization, and participate in the mission of up-skilling India's rural and semi-urban youth. EduBridge is also backed by a well-known venture capital company – Acumen Fund, which invests in firms that create a social impact.

Learning by Doing

The learning happens by doing -> for every topic the concepts are explained with a mix of theory and production quality code. In the end of the program, you will be able to:

- Obtain, clean/process and transform data.
- Analyze and interpret data using an ethically responsible approach.
- Use appropriate models of analysis, assess the quality of input, derive insight from results, and investigate potential issues.
- Apply computing theory, languages and algorithms, as well as mathematical and statistical models, and the principles of optimization to appropriately formulate and use data analysis.
- Formulate and use appropriate models of data analysis to solve hidden solutions to business-related challenges.
- Interpret data findings effectively to any audience, orally, visually and in written formats.
- Predict the given dataset based on the requirements and type of data different Data Analytics tools.

Employability Skills

- Build team work and communication skills at workplace.
- Maintain etiquette with seniors/ male/ female colleagues.
- Understand the importance of non-verbal skills and listening skills.
- Know the importance of sharing work related information.
- Developing good interview skills by understanding the interview process.
- Handling queries over e-mail.

- **Data Analytics**
 - Recall the meaning and importance of Data
 - Describe the term data analytics and understand the difference between data analytics and data analysis.
 - Role of data analyst.
- **Basics of Statistics**
 - Understand about statistics and types of statistics.
 - Learn descriptive Statistics & its measures.
 - Learn about Inferential Statistics.
 - Understand Importance of statistics
- **Hadoop Basics**
 - Understand what Hadoop is and what it isn't
 - Demonstrate the different components of Hadoop
 - Know who uses Hadoop

- **Python**
 - Learn the fundamentals of Python, which are data types, operators, loops, functions, multithreading, exception handling, file management etc
 - Understand Object-oriented programming in Python which are inheritance, Polymorphism, Encapsulation and Data Abstraction.
 - Know about Pandas/ Numpy/ Data Cleaning/ Data Processing.
 - Know about Data wrangling/ Data Visualisation.
 - Know Statistical Analysis of Data using Python

- **MongoDB**
 - Understand why MongoDB is the most widely adopted NoSQL technology
 - Demonstrate how to get Mongo running, manipulate data and query data and arm with the essential skills required to start using Mongo

- **R Programming**
 - Understand the overview of R program.
 - Know about Data Types/ List/ Matrices/ Arrays/ Data Frames.
 - Know about variables/ Operators/ Decision making/ Loops/ Apply lapply(), sapply(), tapply() functions in R.
 - Know about Data Re-shaping/ Interfaces.
- **SAS - For Beginner**
 - Understand the overview of SAS.
 - Know about SAS Studio/ SAS- Program Structure.
 - Know SAS: Variables/ String/ Numeric Formats.
 - Know SAS Macros/ Data Sets/ SAS ODS
- **Basic & Advanced Excel**
 - Familiarize oneself with Excel's basic features.
 - Develop formulas to simplify calculations.
 - Create Pivot Tables in order to display and summarize large quantities of data effectively.
 - Explore the different Lookup functions, and understand how to add further functionality to a spreadsheet to reference particular data quickly and effectively.