

**New to Data!  
No Problem.**



# **Data Literacy**

Before embarking on the data journey, organizations need to be equipped with the right skills and be data literate. This course walks through that journey and empowers individuals with the skills required to get an organization ready.

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**Start your data science  
journey with us.**

No prerequisites are required to attend this course.

A short  
course in  
16 hours.



## What You'll Learn

Numerous organizations and individuals today are embarking on the journey of digital and data transformation. The primary step to this process is data literacy, the ability to communicate, read and write about data in specific contexts. Furthermore, both individuals and organizations need to know how to access and assess data, find meaning and derive actionable business insights. Individuals should be able to use data to influence their daily activities as well as big-picture decisions. It is critical for everyone to know how to do the above, not just the data analysts or the data scientists. ***Data Literacy is the enabler.*** Being data literate will allow an employee or individual to experiment with the data and uncover new insights and generate opportunities. In addition, being data literate is a big part of data security and would reduce risks of data breaches and issues. Putting data to good use is the key for any business.

Learn how you can put your  
data to good use.

# About the Course

These are the key takeaways that participants will gain:

- What Data Literacy is all about and its importance
- Fundamental elements of data
- Overview of data sources, where and how data can be collected
- How to ask questions from data
- Data Analytics – Foundations, Basic Statistics, Reasoning
- Data Complexity, Relationships in Data and Inference
- Importance of data storytelling and visualization
- Interpreting and gathering insights from visualization
- Logical and critical thinking to make data informed decisions
- Using data to see the future

**It's about your goals & your future!**

# Course Outline

## Module 1: Exploring Data Literacy

The first step before diving into the complex operations with data is to understand what data is all about and why it is important for any organization or business to be data literate. This module explores those perspectives.

- What does it mean to be Data Literate?
- Data Literacy Roadmap and adoption
- Why data is important for any organization?
- What can be done with data?

## Module 2: Data Sources and Data Collection

Diving deeper into the data literacy roadmap, the primary resource where things start off is the data. It is important to know where data can come from and how data should be collected. This module covers the in-depths of this process.

- Data Touchpoints
- Data Collection Methodologies
- How clean should the data be made?
- Typical Data Cleaning and Transformation techniques

## Module 3: Asking questions from Data

Data is all about asking questions and building up the business value. This module covers how and what kind of questions should be asked from the data. It is important not to miss out on asking any critical questions which may help the business.

- Defining a business problem
- What parts of the data are important?
- How do you formulate questions from the important part of the data?
- Answering the questions through the data

## Module 4: Data Analytics – Taking data a step further

In order to uncover insights using statistics and other techniques, it is imperative to know how it can be applied to the data and what it can give you. This module solely focuses on establishing foundational analytics and exploring relationships in data.

- The Analytics Roadmap for a Business
- What does Analytics consist of?
- Does Analytics involve Statistics? Understanding important statistical concepts
- Exploring relationships in the data using statistical and non-statistical methods

## **Module 5: Foundations of Data Visualization**

Data in textual format is not the best way to derive insights and understand data. Visuals, Charts & Graphs always appeal to a wider audience because it makes the data easier to understand and comprehend. In this module, we will learn what data visualization is all about and the best practices with Data Visualization.

- What are the various types of visualizations available?
- How do we link data to visualizations? Choosing the right kind of visual for the right context
- Deriving insights from visualizations
- Best practices of data visualizations
- Exploring Business Cases

## **Module 6: Telling a Data Story**

Communication is key with data. Being able to narrate a story with your data through your visuals and business insights is critical to everyone. This module focuses on how a story can be developed from dashboards and visuals and how this should be communicated to different kinds of audience.

- Why is Data Storytelling important?
- How to identify your audience?
- Key elements of Data Storytelling
- Pitfalls of Data Storytelling
- Exploring Narrations

## **Module 7: Making Data Informed Decisions**

The end goal with data is always to drive value and gather insights. Ultimately, any organization would want to take decisions based on the gathered insights to help the business. This module helps you understand, through various business cases, how that value can be derived and how decisions can be taken based on the data.

- Visual and data informed decision making
- Decision making techniques

## **Module 8: Looking into the Future**

There's a lot more that can be done with the data, especially by employing new techniques and advanced analytics. This module gives you an overview of how predictive analytics, machine learning and other technologies can help you maximize the use of your data.

- Introduction to Predictive Analytics
- Introduction to Time Series
- What Machine Learning is all about?
- Application of Machine Learning to Business
- What's next with data?



# Join us & launch your career in data science.

It's time to upskill for the Industry 4.0

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